

What is claimed is:

1. A simulation device comprising:

program analyzing means for reading out a feeding speed of an operative part described in a program;

replacing means for calculating the maximum feeding speed of the operative part from an interference detecting distance and an interpolation period, and replacing the feeding speed of the operative part, which is read out by the program analyzing means, with the maximum feeding speed thereof;

interpolation point determining means for determining interpolated points of a moving path from the feeding speed of the operative part, which is replaced with the maximum feeding speed by the replacing means, and the interpolation period; and

simulation means for making an interference check on the operative part at an interpolated point determined by the interpolation point determining means.

2. The simulation device according to Claim 1, wherein the replacing means divides the interference detecting distance by the interpolation period to find a simulation speed, as well as divides the simulation speed by the feeding speed of the operative part, which is read out by the program analyzing means, to find a speed ratio, and multiplies the feeding speed of the operative part by the speed ratio to find the maximum feeding speed of the operative part.

3. The simulation device according to Claim 2, wherein the

replacing means divides, when there are a plurality of operative parts, the simulation speed by the feeding speed among the feeding speeds of the plurality of operative parts to calculate the speed ratio.

4. The simulation device according to Claim 2, wherein the replacing means divides, when there a plurality of machines of interest in the simulation space, the simulation speed by the maximum feeding speed among the feeding speeds of the operative parts of the plurality of machines to find a speed ratio.

5. The simulation device according to Claim 1, wherein driving means is provided for driving the operative part at the feeding speed of the operative part, which is read out by the program analyzing means, when an execution mode is changed from a simulation mode to an actual machine operation mode.

6. The simulation device according to Claim 5, wherein program analyzing means, replacing means, and interpolation point determining means for the actual machine operation mode are separately provided in addition to the program analyzing means, the replacing means, and the interpolation point determining means for the simulation mode.